Persons with Disabilities: Personal Vehicle Travel in Canada

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101-01820

1.0 Introduction

This report provides a profile of persons with disabilities and personal vehicle travel in Canada. It is one of six modal reports concerning persons with disabilities and transportation in Canada. The remaining five modal reports focus on:

- air travel;
- intercity bus travel;
- rail travel;
- marine (i.e., ferry) travel; and,
- travel involving local modes of transportation (i.e., public transit, specialized transit, and taxis).

These reports provide both detailed information on the specific modes of travel and a general overview of persons with disabilities. An overview report presenting highlights of the modal reports, has also been prepared. The overview report contains a more detailed and comprehensive overview of the characteristics of persons with disabilities. To obtain a complete picture of persons with disabilities and air travel in Canada, the reader should consult the overview report in addition to this modal report.

1.1 Data Source

The information provided in this report was generated using the TransAccess Information Base, a computer system that can be used to obtain predefined and custom tabulations on the characteristics of individuals with disabilities. Table 1.1 provides an overview of the data that can be generated by TransAccess.

Table 1.1: Information Available Through TransAccess

- ***Socio-economic characteristics** of persons with disabilities (e.g., age, gender, income, employment, education).*
- ***Disability information** (e.g., types of disabilities, such as mobility, agility, hearing, seeing, etc.; use of special aids; and severity of disabilities).*
- ***Transportation information**, including modes of transportation used by persons with disabilities (e.g., inter-city [rail, air, bus], local [public transit, specialized transit taxi], and personal vehicles [cars, vans]), availability of transportation services, types of trouble encountered while travelling, need for special services, etc.)*
- ***Geographic information** (e.g., the geographical distribution of persons with disabilities at national and provincial levels, and at urban and rural levels).*

The data source for TransAccess is the Health and Activity Limitation Survey (HALS) undertaken by Statistics Canada. HALS, which was developed through consultation with government representatives, associations of and for persons with disabilities, and persons with

disabilities themselves, was first conducted in 1986 following the 1986 Census and repeated in 1991 following the 1991 Census. Both the 1986 and 1991 HALS included a Households component (which focused separately on adults and children) and an Institutions component.

The 1991 HALS Households Survey was carried out in two stages. The first stage involved analyzing the responses to two questions on the 1991 Census long form questionnaire (#18 and #19, on activity limitation and long-term disability respectively). Individuals who answered positively to these questions were identified, and approximately 35,000 were chosen as the target population for the HALS survey.

Field tests indicated that many persons with a disability did not answer "yes" to the questions on activity limitation. To avoid potential biases in the target population, it was decided to select a sample of individuals who responded "no" to these disability questions. Approximately 113,000 individuals were selected for the "no" sample. Combined, the "yes" and "no" samples represented the overall HALS survey sample.

The 1991 HALS Microdata File (the source for much of the data generated for this report) contains information on 91,355 people (25,942 persons with disabilities and 65,413 persons without disabilities). With weighting of the data, the HALS Microdata File contains information on 21,063,077 people (3,533,089 persons with disabilities and 17,529,988 persons without disabilities). The 1991 HALS Microdata File was released in October, 1994. Additional data on the number of trips made by persons with disabilities (by mode) was made available by Statistics Canada in December 1995.

The HALS survey covered the following nine areas:

A: Disability Screening
B: Use of Technical Aids and Services
C: Everyday Activities
D: Education
E: Employment
F: Transportation
G: Accommodation
H: Recreation and Lifestyles
I: Economic Characteristics

If an individual responded "yes" to any of the disability screening questions in Section A of the 1991 HALS, the remainder of the survey was undertaken. If however, they responded "no" to all of the screening questions, they were considered not to have a disability and the survey was terminated.

For reference purposes, Section F of the 1991 HALS questionnaire (which deals specifically with transportation issues) is provided in Appendix A. Note that the information presented in this report is based on the information collected in Section F.

1.2 Guidelines for Interpreting the Data

Unless otherwise noted, the information in this report is based on the 1991 HALS, and pertains to adults, ages 15 and over, who reside in households. The information has been projected to 1995 in order to provide a more timely depiction of the data. The projections were generated by applying 1991 disability incidence rates to 1995 population projections (stratified by age). The population projections are based on Statistics Canada's (1994) medium growth population projections. Projections beyond 1995 are also age adjusted figures.

In particular cases, reference is made to CVs. This relates to the coefficient of variation (CV) of a particular value, which can be used to develop a confidence interval (CI) associated with that value. The CI is a statement on the level of confidence that the true value lies within a specified range of values. For example, a 95% two-sided confidence interval (CI) can be calculated with the following formula:

$$CI = Value (+/- 1.96 \times [CV \times Value])$$

Based on Statistics Canada's guidelines for interpreting data, CVs that are between 16.5% and 33% are highlighted with a "*", indicating that the values should be used with care due to the high variability associated with the values. CVs over 33% are highlighted with a "**", indicating that the values should be used with a greater degree of care due to the even higher variability associated with the values.

1.3 Definition of Persons with Disabilities and Persons with Transportation Disabilities

HALS uses the World Health Organization's (WHO) International Classification of Impairments and Handicaps to define a disability. This states that:

> *"In the context of health experience, a disability is any restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered to be normal for a human being."*

In defining persons with disabilities, HALS uses certain parameters. For example, individuals aged 15 and older were not considered to have a disability if they use a technical aid and that aid completely eliminates the limitation they experience (e.g., an individual who uses a hearing aid or glasses/contact lenses, and states that he/she has no limitation when using the aid, would not be considered to have a disability). Furthermore, the concept of time is also used as an additional parameter in defining persons with disabilities. In particular, the limitation must have lasted, or is expected to last, six months or longer.

Persons with transportation disabilities are a sub-set of persons with disabilities. The definition of persons with transportation disabilities was derived from the responses to questions asked in Section F of the 1991 HALS questionnaire. In particular, persons with transportation disabilities are defined as those individuals:

- *Who because of their health problem(s) or condition(s), are unable to use transportation services; or,*
- *Who use transportation services with more difficulty than those in the general population.*

1.4 Overview of Report

This report is divided into the following sections:

- Section 1.0 provides an introduction and overview of the report;
- Section 2.0 presents a profile of persons with disabilities;
- Section 3.0 profiles persons with disabilities who drive personal vehicles;
- Section 4.0 presents information pertaining to persons with disabilities as passengers of personal vehicles; and,
- Section 5.0 presents a summary of the data profiled in the report.

A Glossary, defining selected terms, is also provided at the end of the report.

2.0 A Profile of Persons with Disabilities

2.1 Demographic Characteristics of Persons with Disabilities

In 1995, an estimated 3.8 million adults in households have a disability. As illustrated in Table 2.1, this accounts for 17.1% of the 22.2 million adults residing in households in Canada.

Of the 3.8 million persons with disabilities, 2.2 million have a transportation disability. Persons with transportation disabilities account for 9.9% of the total adult population in Canada, and 57.5% of all adults with disabilities.

Table 2.1: Persons with Disabilities and Persons with Transportation Disabilities in Canada (1995)

Population Group	Total (000s)	As a % of Total Population
Persons with Disabilities	3,813	17.1%
Persons with Transportation Disabilities	2,193	9.9%
Total Population	**22,240**	**100%**

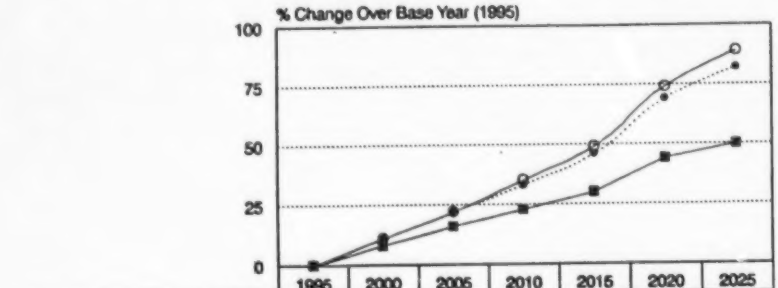
Source: TransAccess Information Base.
Note: Values are age adjusted projections of 1991 HALS (Adults in Households) data.

As illustrated in Exhibit 2.1, the number of adults with disabilities is expected to increase from 3.8 million in 1995 to 6.9 million in 2025. This represents an increase of 82% between 1995 and 2020. Persons with transportation disabilities are predicted to increase from approximately 2.2 million in 1995 to 4.1 million in 2025, an increase of 89%.

Meanwhile, the general population is expected to increase by a much smaller percentage (50%) between 1995 and 2025, from 22.2 million in 1995 to 33.3 million in 2025, a rate that is lower than the rates for persons with disabilities and persons with transportation disabilities.

The high growth rates for persons with disabilities and persons with transportation disabilities is partly explained by the significant growth rates of persons 65 years of age and over. This population group (i.e., persons over the age of 65) is expected to increase from 3.2 million in 1995 to 7.8 million in 2025, an increase of approximately 140%.

Exhibit 2.1: Population Growth Rates in Canada
by Category, 1995-2025
(% Change Over 1995 Base Year)



	1995	2000	2005	2010	2015	2020	2025
Persons w/Transp. Dis. (% Change)	0	11	22	35	49	74	89
Persons w/Transp. Dis. (Millions)	2.2	2.4	2.7	3	3.3	3.8	4.1
Persons w/Disabilities (% Change)	0	11	22	33	46	69	82
Persons w/Disabilities (Millions)	3.8	4.2	4.6	5.1	5.6	6.4	6.9
Total Adult Population (% Change)	0	8	16	23	30	44	50
Total Adult Population (Millions)	22.2	24	25.7	27.4	28.9	32	33.3

Source: TransAccess Information Base.
Note: Values are age adjusted projections of 1991 HALS (Adults in Households) data.

2.2 Age Characteristics of Persons with Disabilities

Table 2.2 indicates that the incidence of disabilities increases with age: whereas only 7.9% of persons between the ages of 15-34 have a disability, 42.5% of persons 65 years of age and over have a disability.

Table 2.2: Persons with Disabilities by Age Group (1995)

Age Group	Total Persons with Disabilities (000s)	As a % of Persons in Age Group
15-34	656	7.9%
35-54	1,137	13.7%
55-64	648	26.6%
65+	1,372	42.5%
Total	**3,813**	**17.1%**

Source: TransAccess Information Base.
Note: Values are age adjusted projections of 1991 HALS (Adults in Households) data.

Table 2.3 indicates that the incidence of transportation disabilities also increases with age: whereas only 3.6% of persons between the ages of 15-34 have a transportation disability, 28.3% of persons 65 years of age and over have a transportation disability.

The high incidence of disabilities for persons 65 years of age and over, coupled with a high growth rate for this population group, are key factors in explaining the predicted high growth rates of persons with disabilities and those with transportation disabilities, as presented in Section 2.1.

Table 2.3: Persons with Transportation Disabilities by Age Group (1995)

Age Group	Total Persons with Transportation Disabilities (000s)	As a % of Persons in Age Group
15-34	301	3.6%
35-54	602	7.3%
55-64	375	15.4%
65+	915	28.3%
Total	**2,193**	**9.9%**

Source: TransAccess Information Base.
Note: Values are age adjusted projections of 1991 HALS (Adults in Households) data.

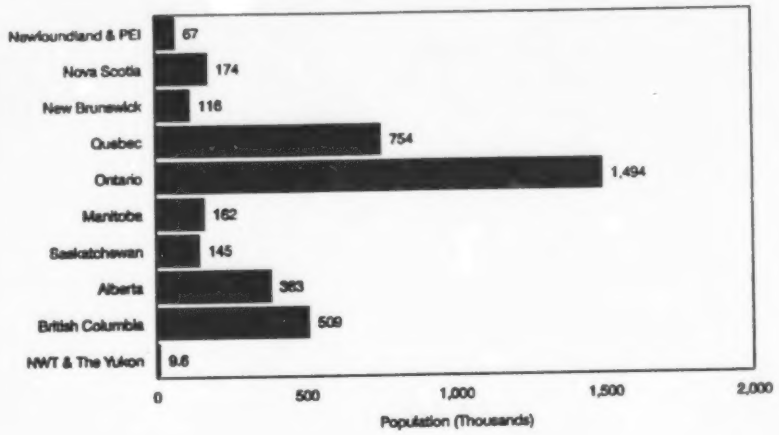
2.3 Persons with Disabilities by Province

Persons with Disabilities

The distribution of persons with disabilities by province is provided in Exhibit 2.2. As illustrated by this exhibit, the provinces with the largest populations of persons with disabilities are Ontario, Quebec, British Columbia, and Alberta. Combined, these provinces account for 82.5% of persons with disabilities in Canada.

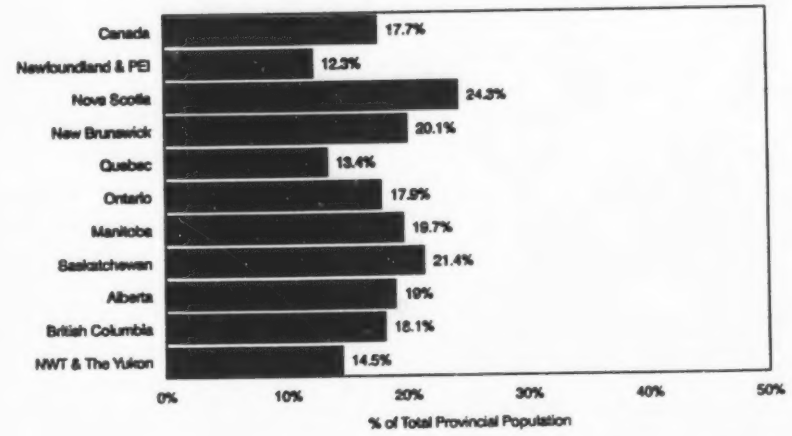
The percentage of persons within a given province that have a disability is given in Exhibit 2.3. Nova Scotia has the highest incidence of disabilities, with 24.3% of persons 15 years of age and over reporting a disability. Nova Scotia is followed by Saskatchewan (21.4%), New Brunswick (20.1%), Manitoba (19.7%), and Alberta (19%). Meanwhile, Quebec (13.4%) and Newfoundland and Prince Edward Island (12.3%) have the lowest disability incidence rates.

Exhibit 2.2: Persons with Disabilities by Province (1995)
(Total Persons with Disabilities: 3,813,000)



Source: TransAccess Information Base.
Note: Values are age adjusted projections of 1991 HALS (Adults in Households) data.

Exhibit 2.3: Persons with Disabilities by Province
(As a % of Total Provincial Population, 1995)



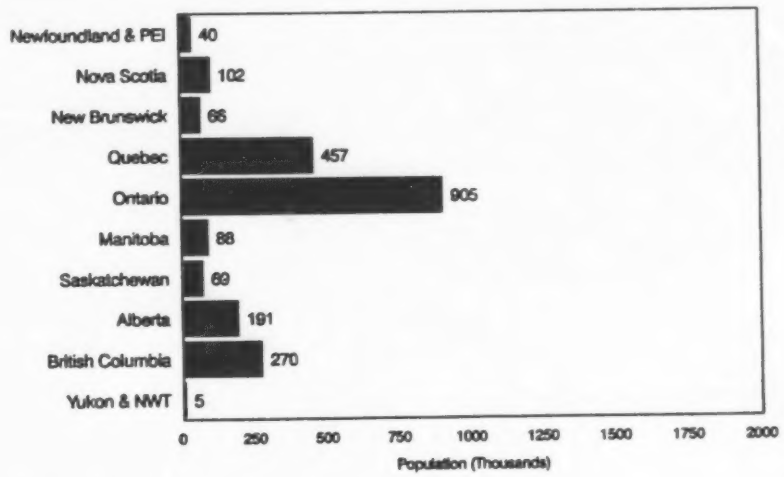
Source: TransAccess Information Base.
Note: Values are age adjusted projections of 1991 HALS (Adults in Households) data.

Persons with Transportation Disabilities

The distribution of persons with transportation disabilities by province is provided in Exhibit 2.4. The provinces with the largest populations of persons with transportation disabilities are again, Ontario, Quebec, British Columbia, and Alberta. Combined, these provinces account for 83.2% of persons with transportation disabilities in Canada.

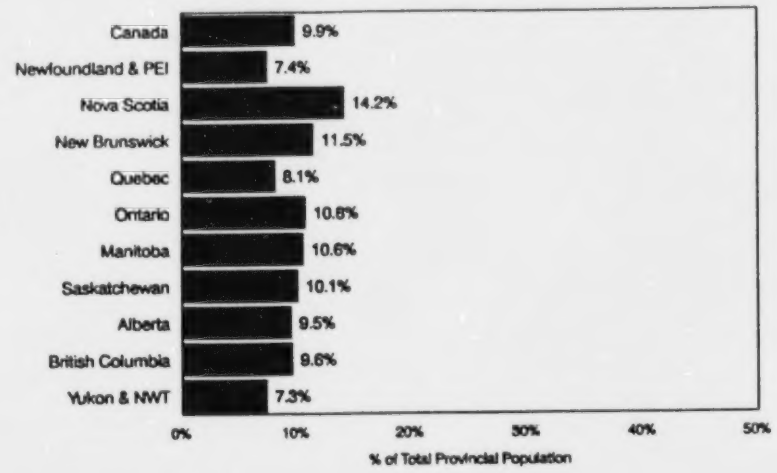
The percentage of persons within a given province that have a transportation disability is given in Exhibit 2.5. As for persons with disabilities, Nova Scotia has the highest incidence of transportation disabilities, with 14.2% of persons 15 years of age and over reporting a transportation disability. Newfoundland and Prince Edward Island (7.4%), and the Northwest Territories and the Yukon (7.3%) have the lowest incidence rates of transportation disabilities.

Exhibit 2.4: Persons with Transportation Disabilities, by Province (1995)
(Total Persons with Transportation Disabilities: 2,193,000)



Source: TransAccess Information Base.
Note: Values are age adjusted projections of 1991 HALS (Adults in Households) data.

Exhibit 2.5: Persons with Transportation Disabilities, by Province
(As a % of Total Provincial Population, 1995)



Source: TransAccess Information Base.
Note: Values are age adjusted projections of 1991 HALS (Adults in Households) data.

2.4 Disability Characteristics of Persons with Disabilities

Types of Disabilities

The disability characteristics of persons with disabilities and persons with transportation disabilities are given in Table 2.4.

As the figures in Table 2.4 indicate, the most common types of disabilities experienced, by both persons with disabilities and persons with transportation disabilities, are:

- mobility disabilities;
- agility disabilities;
- hearing disabilities; and
- other[1] disabilities.

[1] Persons with "other" types of disabilities are those who are limited in their activities of daily living due to a learning disability, a mental health condition, a mental handicap, or labelling by others.

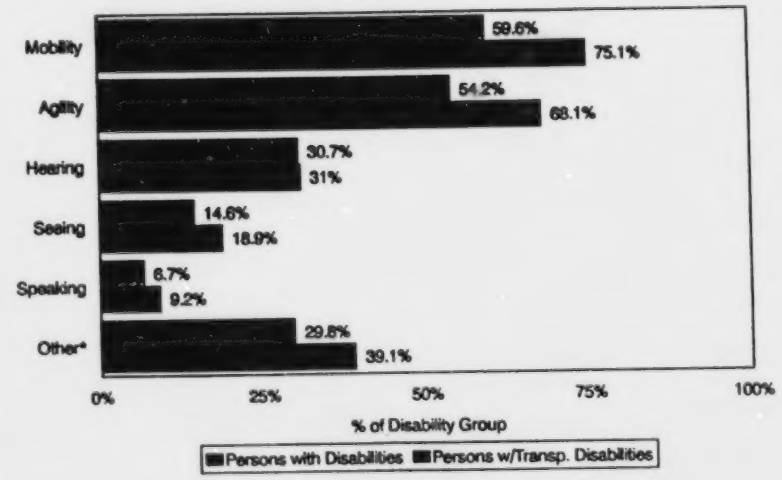
Table 2.4: Disability Characteristics of Persons with Disabilities and Persons with Transportation Disabilities (1995)

Type of Disability	Persons with Disabilities (000s)	Persons with Transportation Disabilities (000s)
Mobility	2,271	1,646
Agility	2,067	1,492
Seeing	558	414
Hearing	1,171	681
Speaking	257	201
Other	1,137	857
Total	**3,813**	**2,193**

Source: TransAccess Information Base.
Note: Values are age adjusted projections of 1991 HALS (Adults in Households) data.

Exhibit 2.6 illustrates the types of disabilities as a percentage of the two disability populations. This exhibit illustrates that persons with transportation disabilities have a higher incidence of mobility, agility, and other disabilities, as compared to the total population of persons with disabilities.

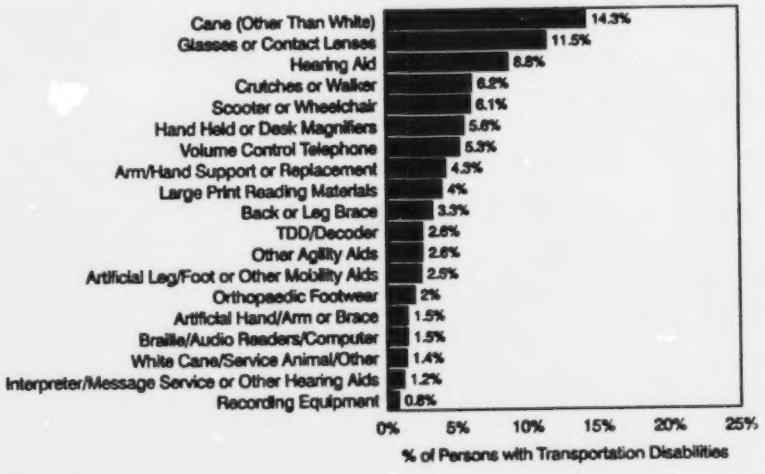
Exhibit 2.6: Disability Characteristics of Persons with Disabilities and Persons with Transportation Disabilities (1995)



Source: TransAccess Information Base.
Notes: Values are age adjusted projections of 1991 HALS (Adults in Households) data. "Other" is defined as individuals who are limited in their activities of daily living due to a learning disability, a mental health condition, a mental handicap, or labelling by others.

Proportionally more persons with transportation disabilities, use canes (other than white canes), glasses or contact lenses, and hearing aids than do persons with disabilities. Furthermore, crutches or a walker, and a scooter or wheelchair replace volume control telephones and hand held desk magnifiers as the fourth and fifth most commonly used special aids. This reflects the higher incidence of mobility disabilities for persons with transportation disabilities as compared to persons with disabilities.

Exhibit 2.9: Types of Special Aids* used by Persons with Transportation Disabilities (1995)
[Total Persons with Transportation Disabilities: 2,193,000]


Cane (Other Than White) 14.3%
Glasses or Contact Lenses 11.5%
Hearing Aid 8.8%
Crutches or Walker 6.2%
Scooter or Wheelchair 6.1%
Hand Held or Desk Magnifiers 5.6%
Volume Control Telephone 5.3%
Arm/Hand Support or Replacement 4.3%
Large Print Reading Materials 4%
Back or Leg Brace 3.3%
TDD/Decoder 2.6%
Other Agility Aids 2.6%
Artificial Leg/Foot or Other Mobility Aids 2.5%
Orthopaedic Footwear 2%
Artificial Hand/Arm or Brace 1.5%
Braille/Audio Readers/Computer 1.5%
White Cane/Service Animal/Other 1.4%
Interpreter/Message Service or Other Hearing Aids 1.2%
Recording Equipment 0.8%
0% 5% 10% 15% 20% 25%
% of Persons with Transportation Disabilities

Source: TransAccess Information Base. Notes: Values are age adjusted projections of 1991 HALS (Adults in Households) data.
**Types of special aids add up to more than 100% due to multiple responses.*

3.0 Persons with Disabilities who drive Personal Vehicles

3.1 Persons with Disabilities who drive Personal Vehicles

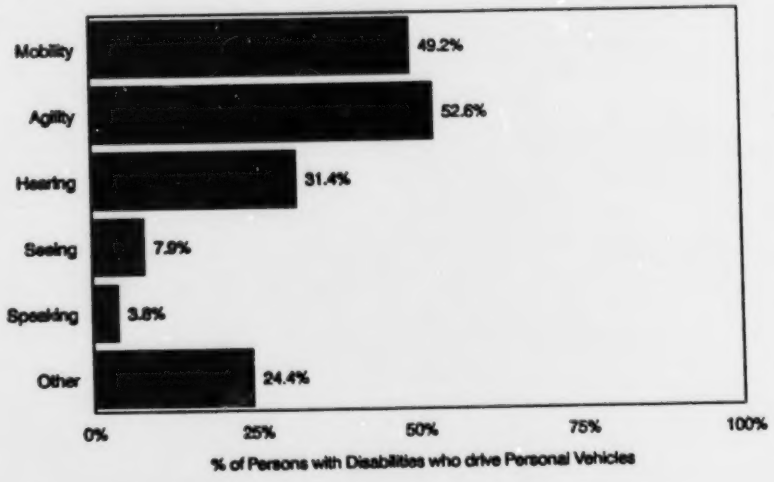
In 1995, an estimated 2.1 million adults with disabilities drive personal vehicles, representing approximately 55% of all adults with disabilities in Canada.

Persons with Disabilities who drive Personal Vehicles, by Types and Severity of their Disabilities

As illustrated in Exhibit 3.1a, mobility, agility and hearing disabilities characterize many of the persons with disabilities who drive personal vehicles. Persons with seeing and speaking disabilities represent relatively few of those persons with disabilities who drive personal vehicles.

Exhibit 3.1a: Disability Characteristics of Persons with Disabilities who drive Personal Vehicles (1995)

[Total Persons with Disabilities who drive Personal Vehicles: 2.1 million]

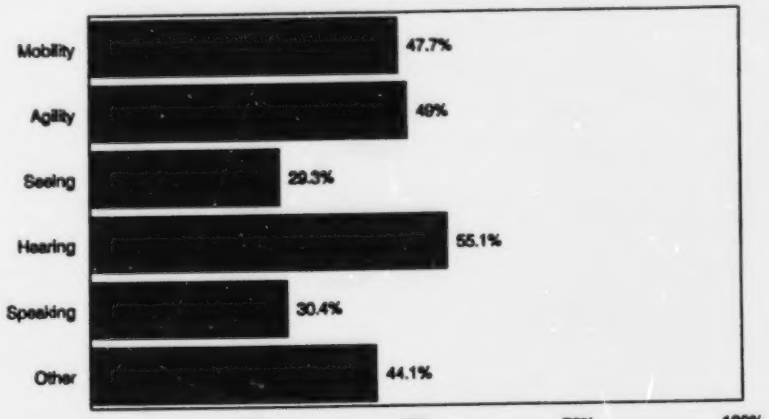


Source: TransAccess Information Base.
Note: Values are age adjusted projections of 1991 HALS (Adults in Households) data.

Exhibit 3.1b profiles those persons with disabilities who drive personal vehicles as a percentage of each disability group. As illustrated by this exhibit, persons with hearing disabilities have the highest propensity to drive personal vehicles. Those with hearing disabilities who drive personal vehicles represent 55.1% of all persons with hearing disabilities.

Exhibit 3.1b: Persons with Disabilities who drive Personal Vehicles as a Percentage of Each Disability Group (1995)

[Total Persons with Disabilities who drive Personal Vehicles: 2.1 million]



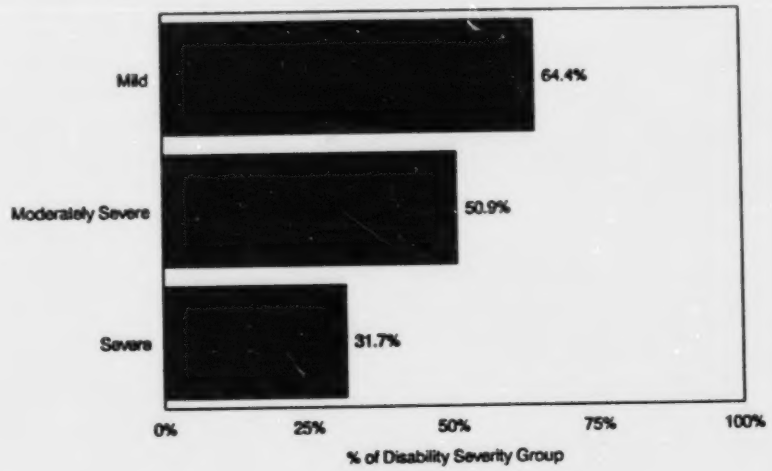
Source: TransAccess Information Base.
Note: Values are age adjusted projections of 1991 HALS (Adults in Households) data.

With respect to the severity of their disability, persons with disabilities who drive personal vehicles are more likely to have mild disabilities. Of those persons with disabilities who drive personal vehicles, 58.2% have a mild disability. Only 10.7% have a severe disability, while 31.1% have a moderately severe disability.

Exhibit 3.2 profiles those persons with disabilities who drive personal vehicles as a percentage of each disability severity group. As illustrated by this exhibit, persons with mild disabilities have the highest propensity to drive personal vehicles. Those persons with mild disabilities who drive personal vehicles represent 64.4% of all persons with mild disabilities.

Persons with moderately severe disabilities also have a relatively high propensity to drive personal vehicles. In particular, 50.9% of persons with moderately severe disabilities drive a personal vehicle.

Exhibit 3.2: Persons with Disabilities who drive Personal Vehicles as a Percentage of Each Disability Severity Group (1995)
[Total Persons with Disabilities who drive Personal Vehicles: 2.1 million]



Source: TransAccess Information Base.
Note: Values are age adjusted projections of 1991 HALS (Adults in Households) data.

Individual Annual Employment Income Distribution of Persons with Disabilities who Drive Personal Vehicles

As indicated in Exhibit 3.3a, persons with disabilities who drive personal vehicles (ages 15-64 only[2]) have relatively higher incomes than both those who do not drive personal vehicles and persons with disabilities in general.

In particular, 31.7% of persons with disabilities who drive personal vehicles have an individual annual employment income of $25,000 or more (expressed in 1991 dollars). In comparison, 6.0% of those who do not drive personal vehicles have an individual employment income of $25,000 or more, while 23.4% of persons with disabilities in general have an individual employment income over $25,000.

Exhibit 3.3b profiles those persons with disabilities who drive personal vehicles as a percentage of each income group. As illustrated in this exhibit, persons with disabilities with incomes of $35,000 and above (expressed in 1991 dollars) had the highest propensity to drive a personal vehicle.

In particular, those persons with disabilities with incomes of $35,000 and above who drive personal vehicles represent 88.5% of all persons with disabilities with incomes of $35,000 and

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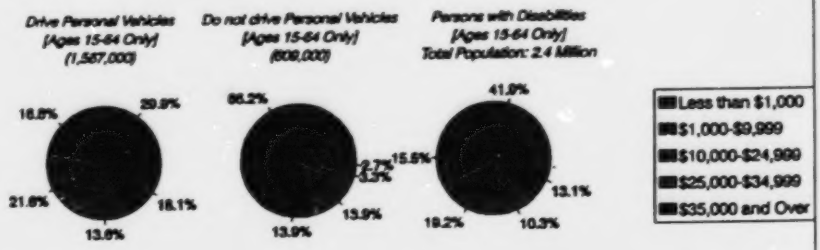
[2] Note that due to the HALS survey design, information on employment income was only collected for persons between the ages of 15 and 64.

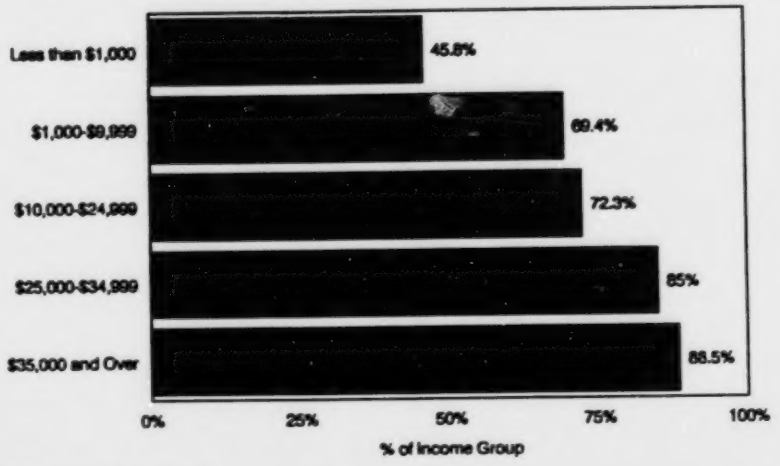
above. Persons with disabilities with an annual individual employment income of $25,000-$34,999 also have a high propensity to drive, with 85.0% of the persons with disabilities in this income group driving a personal vehicle.

Exhibit 3.3a: Individual Annual Employment Income Distribution of Persons with Disabilities who drive Personal Vehicles (1991 Dollars, Ages 15-64 only, 1995)



Source: TransAccess Information Base. Notes: Values are age adjusted projections of 1991 HALS (Adults in Households) data. Income is expressed in 1991 dollars. Due to the HALS survey design, information on employment income was only collected for persons between the ages of 15 and 64.

Exhibit 3.3b: Persons with Disabilities who drive Personal Vehicles as a Percentage of Each Income Group (1995)
[Total Persons with Disabilities who drive Personal Vehicles: 1,567,000]



Source: TransAccess Information Base.
Note: Values are age adjusted projections of 1991 HALS (Adults in Households) data.

Persons with Disabilities who drive Personal Vehicles, by Age

Table 3.1 profiles persons with disabilities who drive personal vehicles, by age. This table indicates that the majority of persons with disabilities who drive personal vehicles are between the ages of 15 and 64. In particular, slightly more than 76% of persons with disabilities who drive personal vehicles are in this age group, only 23.9% of persons with disabilities who drive personal vehicles are 65 years of age and over.

Table 3.1: Persons with Disabilities who drive Personal Vehicles, by Age (1995)

Age Group	As a % of Those who drive Personal Vehicles
15-34	19.5%
35-54	37.8%
55-64	18.9%
65+	23.9%
Total	**100.0%**

Source: TransAccess Information Base.
Note: Values are age adjusted projections of 1991 HALS (Adults in Households) data.

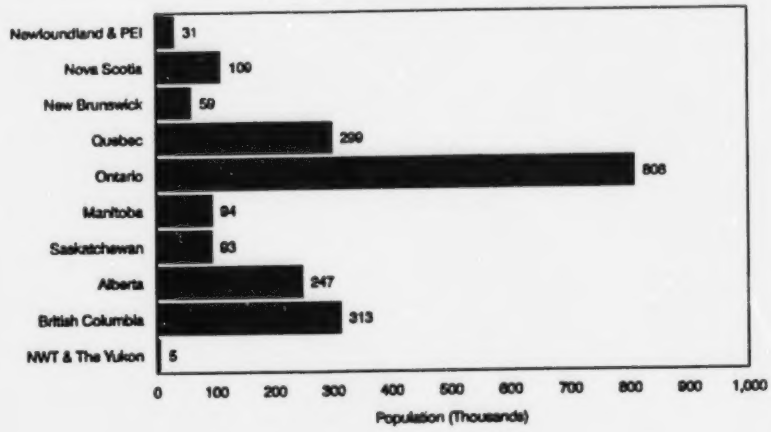
Persons with Disabilities who drive Personal Vehicles, by Province

Exhibit 3.4 presents a geographical profile of persons with disabilities who drive personal vehicles. Ontario accounts for the largest population of persons with disabilities who drive personal vehicles. Of the 2.1 million persons with disabilities who drive personal vehicles, 808,000 (38.5%) live in Ontario.

The number of persons with disabilities who drive personal vehicles, as a percentage of each province's total disability population is profiled in Exhibit 3.5. As this exhibit indicates, 50%-65% of persons with disabilities within each province drive personal vehicles, with the exception of Québec and Newfoundland/Prince Edward Island. In Québec, 39.6% of persons with disabilities drive personal vehicles, while in Newfoundland/PEI, 47.2% of persons with disabilities drive personal vehicles.

Exhibit 3.4: Persons with Disabilities who drive Personal Vehicles, by Province (1995)

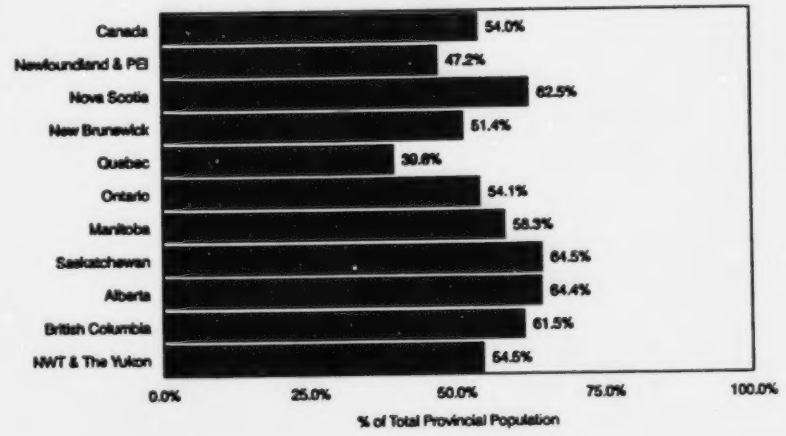
[Total Persons with Disabilities who drive Personal Vehicles: 2.1 million]



Source: TransAccess Information Base.
Note: Values are age adjusted projections of 1991 HALS (Adults in Households) data.

Exhibit 3.5: Persons with Disabilities who drive Personal Vehicles, by Province

(As a % of Total Provincial Population of Persons with Disabilities, 1995)



Source: TransAccess Information Base.
Note: Values are age adjusted projections of 1991 HALS (Adults in Households) data.

Special Features Used by Persons with Disabilities who drive Personal Vehicles

As illustrated in Table 3.2, the special features most commonly used by persons with a disability when driving a personal vehicle are power steering, power windows, and/or power mirrors. Of the 2.1 million persons with disabilities who drive personal vehicles, 212,000 (10.1%) use these features.

Special features such as hand controls or brake controls, hand rails, straps, specialized handles, ramps or lifts, and/or space for a wheelchair or other special equipment (including storage space) are used by 46,000 persons with disabilities when driving personal vehicles.

Table 3.2: Special Features used as a Driver (1995)

Feature	Total (000s)	As a % of Those who drive Personal Vehicles
Power Steering/Windows/Mirrors	212	10.1%
Hand/Brake Controls, Hand Rails, Straps, Special Handles, Ramps or Lifts, Space for Wheelchair	46	2.2%
Other Features	68	3.2%
Total	**2,000**	**100.0%**

Source: TransAccess Information Base.
Note: Values are age adjusted projections of 1991 HALS (Adults in Households) data.

4.0 Persons with Disabilities as Passengers of Personal Vehicles

4.1 Persons with Disabilities who travel as Passengers of Personal Vehicles

In 1995, an estimated 3.3 million adults with disabilities travel as passengers in personal vehicles. This represents approximately 86% of all adults with disabilities in Canada. The remaining 14.0% includes 6.4% who consider themselves restricted to their residences, 1.5% who stated during the HALS survey that they "never travel as a passenger", and 6.0% not stated responses (totals may not add-up to 100% due to rounding).

Special Features used by Persons with Disabilities as a Passenger in Personal Vehicles

As illustrated in Table 4.1, the special feature most commonly used by persons with disabilities as a passenger of a personal vehicle is space for a wheelchair or other special equipment (including storage space). Of the 3.3 million persons with disabilities who travel as a passenger in a personal vehicle, 60,000 (1.8%) use this feature.

Hand rails, straps, specialized handles, ramps or lifts are used by 52,000 persons with disabilities when travelling as a passenger.

Table 4.1: Special Features used as a Passenger (1995)

Feature	Total (000s)	As a % of Those who travel as a Passenger
Space for Wheelchair or other Special Equipment (including Storage Space)	60	1.8%
Hand Rails, Straps, Special Handles, Ramps or Lifts	52	1.6%
Other Features	59	1.8%
Total	**3,300**	**100.0%**

Source: TransAccess Information Base.
Note: Values are age adjusted projections of 1991 HALS (Adults in Households) data.

4.2 Persons with Disabilities who have Difficulties as a Passenger in Personal Vehicles

Of the 3.3 million persons with disabilities who travel as a passenger in personal vehicles, 7.7% (254,000) have difficulties due to their condition or health problem.

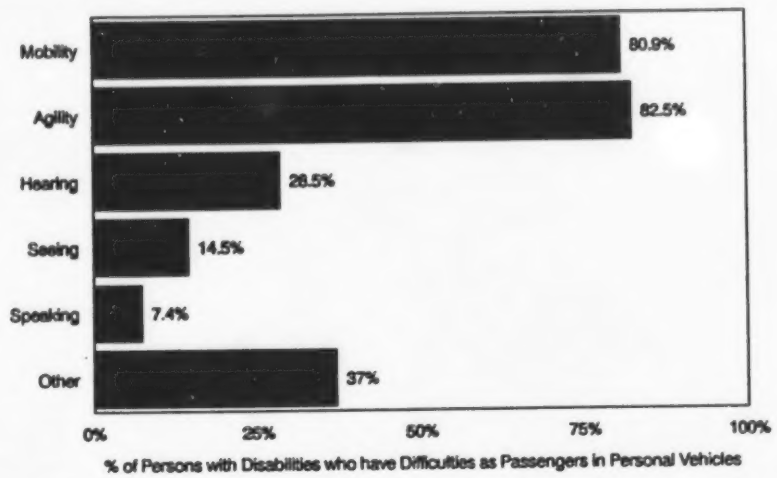
Persons with Disabilities who have difficulties travelling as a Passenger in Personal Vehicles, by their Disability Types and Severity

As illustrated in Exhibit 4.1a, agility and mobility disabilities characterize many of the persons with disabilities who have difficulties as passengers in personal vehicles.

Exhibit 4.1b profiles those persons with disabilities who have difficulties as passengers in personal vehicles as a percentage of each disability group. As illustrated by this exhibit, persons with agility disabilities have the highest propensity to have difficulty as a passenger in personal vehicles. Those with agility disabilities who have difficulties as passengers in personal vehicles represent 10.1% of all persons with agility disabilities.

Exhibit 4.1a: Disability Characteristics of Persons with Disabilities who have Difficulties as Passengers in Personal Vehicles (1995)

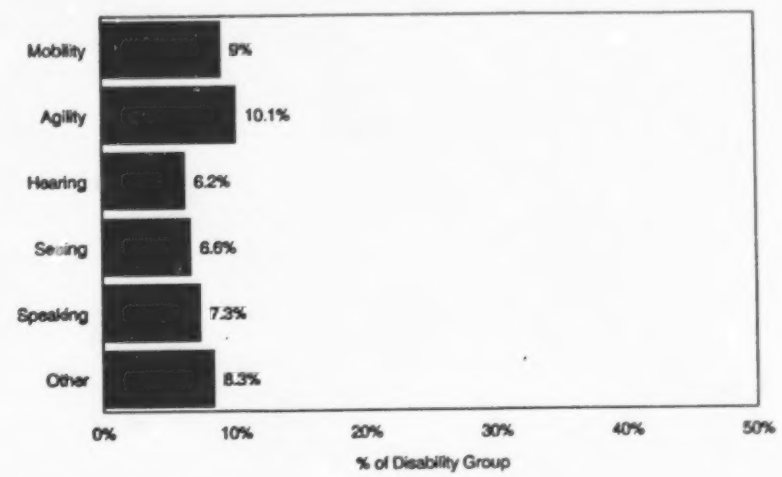
[Total Persons with Disabilities with Difficulties as Passengers in Personal Vehicles: 254,000]



Source: TransAccess Information Base.
Note: Values are age adjusted projections of 1991 HALS (Adults in Households) data.

Exhibit 4.1b: Persons with Disabilities who have Difficulties as Passengers in Personal Vehicles, as a Percentage of Each Disability Group (1995)

[Total Persons with Disabilities with Difficulties as Passengers in Personal Vehicles: 254,000]

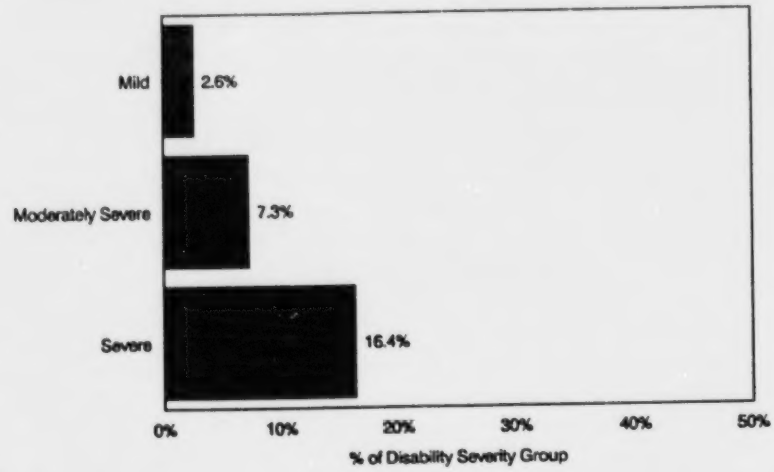


Source: TransAccess Information Base.
Note: Values are age adjusted projections of 1991 HALS (Adults in Households) data.

Persons with disabilities who have difficulties as passengers in personal vehicles are more likely to have severe disabilities. Of those persons with disabilities who have difficulty as a passenger in personal vehicles, 44.8% have a severe disability, 19.0% have a mild disability, and 36.2% have a moderately severe disability.

Exhibit 4.2 profiles those persons with disabilities who have difficulty as a passenger in personal vehicles as a percentage of each disability severity group. As illustrated by this exhibit, persons with severe disabilities have the highest propensity to have difficulties as a passenger in personal vehicles. Those with severe disabilities who have difficulty as a passenger in personal vehicles represent 16.4% of all persons with severe disabilities.

Exhibit 4.2: Persons with Disabilities who have Difficulties as Passengers in Personal Vehicles as a Percentage of Each Disability Severity Group (1995)
[Total Persons with Disabilities with Difficulties as Passengers in Personal Vehicles: 254,000]



Source: TransAccess Information Base.
Note: Values are age adjusted projections of 1991 HALS (Adults in Households) data.

Persons with Disabilities who have Difficulties travelling as Passengers in Personal Vehicles, by Age

Table 4.2 profiles persons with disabilities who have difficulties as passengers in personal vehicles, by age. This table indicates that the majority of persons who have difficulties as passengers in personal vehicles are between the ages of 15 and 64. In particular, 76.5% of persons with disabilities who have difficulties as passengers in personal vehicles are in this age group.

Persons with Disabilities who have Difficulties as Passengers in Personal Vehicles, by Province

Exhibit 4.3 presents a geographical profile of persons with disabilities who have difficulties as passengers in personal vehicles. As this exhibit indicates, Ontario accounts for the largest population of persons with disabilities who have difficulties as passengers in personal vehicles. Of the 254,000 persons with disabilities who have difficulties as passengers in personal vehicles, 97,000 (38.2%) live in Ontario.

The number of persons with disabilities who have difficulties as passengers in personal vehicles, as a percentage of each province's total disability population is profiled in Exhibit 4.4. As this exhibit indicates, persons with disabilities who have difficulties as passengers in personal vehicles account for less than 10.0% of each province's disability population.

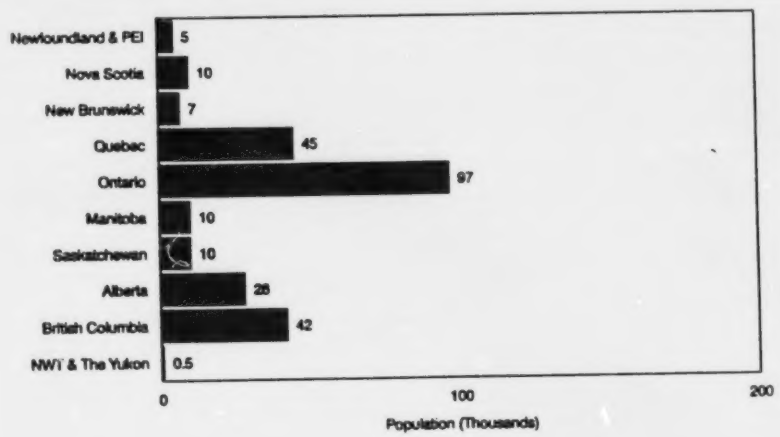
Table 4.2: Persons with Disabilities who have Difficulties as Passengers in Personal Vehicles, by Age (1995)

Age Group	As a % of Those who have difficulties as Passengers in Personal Vehicles
15-34	15.2%
35-54	37.7%
55-64	23.6%
65+	23.6%
Total	**100.0%**

Source: TransAccess Information Base.
Note: Values are age adjusted projections of 1991 HALS (Adults in Households) data.

Exhibit 4.3: Persons with Disabilities who have Difficulties as Passengers in Personal Vehicles, by Province (1995)

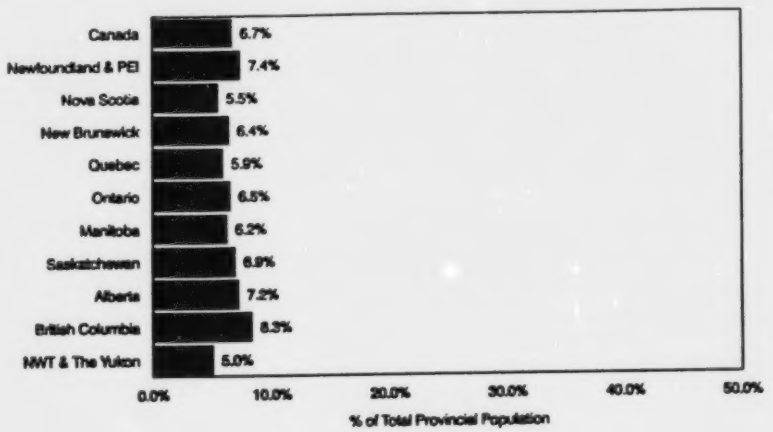
[Total Persons with Disabilities with Difficulties as Passengers in Personal Vehicles: 254,000]



Source: TransAccess Information Base.
Note: Values are age adjusted projections of 1991 HALS (Adults in Households) data.

Exhibit 4.4: Persons with Disabilities who have Difficulties as Passengers in Personal Vehicles, by Province

(As a % of Total Provincial Population of Persons with Disabilities, 1995)



Source: TransAccess Information Base.
Note: Values are age adjusted projections of 1991 HALS (Adults in Households) data.

5.0 Long Distance Trips taken by Personal Vehicle

Table 5.1 presents a profile of the estimated number of long distance trips (of at least 80 km, or 50 miles) taken by persons with disabilities, by mode, in the three month period between April 1 and June 30, 1995.

As this table indicates, approximately 1.67 million persons with disabilities took long distance trips by personal vehicle (i.e., car, van or truck) during this period, with a total of 13.9 million trips being taken during this three month period. Of both public and private long distance modes of transportation, personal vehicle represents the most frequently used mode both in terms of persons with disabilities taking trips and total trips taken.

Table 5.1: Estimated Number of Long Distance Trips (of at least 80 km, or 50 miles) taken by Persons with Disabilities, by Mode, between April 1 and June 30, 1995

Mode	Total Number of Trips Taken (000s)	Total Persons Taking Trips (000s)	Number of Persons (000s) Taking:			
			1 Trip	2 Trips	3-5 Trips	6+ Trips
Air	614	307	217	53	17	20
Intercity Bus	544	248	148	52	33	15
Rail	143	68	50	10	5*	2*
Marine/Ferry	474	202	110	47	31	14
Car, Van or Truck	13,919	1,672	482	317	397	477

Source: Statistics Canada Special Run. Notes: Values are age adjusted projections of 1991 HALS (Adults in Households) data. Trip estimates are based on usage in the three month period between April 1 and June 30, 1991. *Use figure with care; CV is between 16.5% and 33%.

6.0 Summary

The following are highlights of the data presented in this report.

Persons with Disabilities

- in 1995, there were 3.8 million persons with disabilities accounting for 17.1% of the Canadian adult population over the age of 15 residing in households, with 57.5% of these persons (2.2 million) having transportation disabilities, accounting for 9.9% of the adult population.

- the population of persons with disabilities is expected to increase 82% by the year 2025, to 6.9 million, while the population of persons with transportation disabilities is anticipated to increase by 89% to 4.1 million by 2025. Both of these growth rates exceed that of the general adult population, which is expected to increase by 50% between 1995 and 2025.

- the age distribution of persons with disabilities and persons with transportation disabilities indicate that the incidence of disabilities increases with age. This factor, combined with the growth rate of the population of persons 65 years of age and over, is a driving force behind the increase in the disability populations. Between 1995 and 2025, this age group is expected to increase by approximately 140%, from 3.2 million to 7.8 million.

- in terms of the geographical distribution of persons with disabilities, the provinces of Ontario, Quebec, British Columbia and Alberta represent 82.5% of all persons with disabilities within Canada. These same four provinces represent 83.2% of persons with transportation disabilities.

- as a percentage of a province's total population, Nova Scotia has the highest incidence rate of disabilities, as 24.3% of Nova Scotia's provincial population has a disability. Newfoundland and Prince Edward Island have the lowest incidence rate at 12.3%. With respect to persons with transportation disabilities, Nova Scotia also has the highest incidence rate, as 14.2% of Nova Scotia's provincial population has a transportation disability. The Yukon and the Northwest Territories both have the lowest rate (7.3%).

- persons with transportation disabilities are more likely to have a mobility or agility disability, as compared to persons with disabilities in general. Persons with transportation disabilities also have a high incidence rate of "other" disabilities.

- persons with transportation disabilities are more likely to have a severe disability, as compared to persons with disabilities in general. In particular, 31.1% of persons with transportation disabilities have a severe disability, as compared to 18.2% for persons with disabilities in general.

- the special aids most frequently used by both persons with disabilities in general and persons with transportation disabilities are a cane (other than a white cane), glasses or contact lenses, and a hearing aid.

Persons with Disabilities as Drivers of Personal Vehicles

- in 1995, it is estimated that 2.1 million persons with disabilities drive personal vehicles, representing approximately 55% of all persons with disabilities in Canada.

- persons with disabilities who drive personal vehicles are more likely to have agility, mobility, and/or hearing disabilities. They are also characterized by mild disabilities (58.2% report a mild disability).

- persons with disabilities who drive personal vehicles have relatively high levels of annual individual employment income, with 31.7% having incomes over $25,000. These persons with disabilities who drive personal vehicles and have annual individual employment incomes of $35,000 or more, represent 88.5% of the total number of persons with disabilities with annual individual employment incomes of $35,000 or more.

- in terms of geographical distribution of persons with disabilities who drive personal vehicles, 38.5% reside within Ontario. With the exception of Québec and Newfoundland/Prince Edward Island, 50%-65% of persons with disabilities within each province drive personal vehicles. In Québec, 39.6% of persons with disabilities drive personal vehicles, while in Newfoundland/PEI, 47.2% of persons with disabilities drive personal vehicles.

- the special features most commonly used by persons with disabilities when driving a personal vehicle are power steering, power windows, or power mirrors. Of the 2 million persons with disabilities who drive personal vehicles, 212,000 (10.1%) use these features. Special features such as hand controls or brake controls, hand rails, straps, specialized handles, ramps or lifts, and/or space for a wheelchair or other special equipment (including storage space) are used by 46,000 persons with disabilities when driving a personal vehicle (2.2% of the total number of persons with disabilities who drive personal vehicles).

Persons with Disabilities as Passengers of Personal Vehicles

- in 1995, it is estimated that 3.3 million persons with disabilities travel as passengers in personal vehicles, representing approximately 86% of all persons with disabilities in Canada.

- the special features most commonly used by persons with disabilities when travelling as passengers in personal vehicles is space for a wheelchair or other special equipment (including storage space). Of the 3.3 million persons with disabilities who travel as passengers in personal vehicles, 60,000 (1.8%) use this features. Special features such as hand rails, straps, specialized handles, ramps or lifts, are used by 52,000 of the 3.3 million persons with disabilities who travel as passengers in personal vehicles (1.6%).

- of the 3.3 million persons with disabilities who travel as passengers in personal vehicles, 254,000 (7.7%) have difficulties due to their condition or health problem(s).

- persons with disabilities who have difficulties travelling as passengers in personal vehicles are more likely to have agility or mobility disabilities and are characterized by severe disabilities (44.8% report a severe disability).

- in terms of geographical distribution of persons with disabilities who have difficulties travelling as passengers in personal vehicles, 38.2% reside within Ontario. Overall, persons with disabilities who have difficulties travelling as passengers in personal vehicles account for less than 10% of each province's total disability population.

Long Distance Trips taken by Personal Vehicle

- during the three month period between April 1 and June 30, 1995, it is estimated that 1.67 million persons with disabilities took long distance trips by personal vehicle, with a total of 13.9 million trips being taken during this three month period. Of both public and private long distance modes of transportation, personal vehicle represents the most frequently used mode both in terms of persons with disabilities taking trips and total trips taken.

Glossary

Disability

The Health and Activity Limitations Survey uses the World Health Organization's definition of disability which is "*... any restriction or lack (resulting from impairment) of ability to perform any activity in the manner or within the range considered normal for a human being.*"

Adults are not considered to have a disability if they use a technical aid and that aid completely eliminates the limitation, e.g., an individual who uses a hearing aid and states that she or he has no limitation when using the aid would not be considered to have a disability. The concept of time has also been added as an additional parameter - the limitation has to be of a minimum six-month duration, i.e., has lasted or is expected to last six months or more.

Labour Force Status

Employed refers to persons who, during the week prior to enumeration:

(a) did any work at all excluding housework or other maintenance or repairs around the home and volunteer work; or,
(b) were absent from their job or business because of temporary illness or disability, vacation, labour dispute at their place of work, or were absent for other reasons.

Unemployed refers to persons who, during the week prior to enumeration:

(a) were without work, had actively looked for work in the past four weeks and were available for work; or,
(b) had been on lay-off and expected to return to their job; or,
(c) had definite arrangements to start a new job in four weeks or less.

Not in Labour Force refers to the working age population who, in the week prior to enumeration, were neither employed nor unemployed.

Type of Disability

Disability type, referred to as 'nature of disability' by Statistics Canada, categorizes an individual's type of disability(ies), and is based upon the respondent's answer to the Section A (Activities of Daily Living) questions of the 1991 HALS Questionnaire.

A person may have multiple disabilities, meaning that he or she has reported a limitation in more than one category of disability type. The categories used for the HALS survey were defined as follows:

Mobility:	Limited ability to walk, move from room to room, carry an object for 10 metres or stand for long periods.
Agility:	Limited in ability to bend, dress or undress oneself, get in and out of bed, cut toe-nails, use fingers to grasp or handle objects, reach, or cut own food.
Seeing:	Limited in ability to read ordinary newsprint or to see someone from four metres, even when wearing glasses.
Hearing:	Limited in ability to hear what is being said in conversation with one other person or in a group conversation with at least three other people, even when wearing a hearing aid.
Speaking:	Limited in the ability to speak and be understood.
Other:	Limited in activities of daily living due to a learning disability, a mental health condition, a mental handicap, or because of labelling by others.

Transportation-Related Disabilities

Persons with Transportation Disabilities are defined as those individuals:

- Who because of their health problem(s) or condition(s), are unable to use transportation services; or,
- Who use transportation services with more difficulty than those in the general population.

This definition is made up of the five sub-groups below.

1. Unable To Travel

Those who are *unable to travel* are defined as:

- question F2(#3): "Do you consider yourself housebound?" - YES; and,
- As defined by the question F20(#7): "Because of your condition or health problem, are you prevented from taking any long trips" - YES

2. Local Transportation

Those who have trouble using *local transportation* services are defined as:

- question F16(#7): "Do you have any trouble using your local public transportation service, because of your condition?" - YES; and/or,
- question F10(#4): "Do you need specialized transit service?" - YES; and/or,
- question F11(#6): "Do you use specialized transit service?" - YES; and/or,

- question F4(#1): "Because of your condition, do you require an attendant or companion to accompany you on short trips?" - YES; and/or,
- question F18(#1): "Because of your condition, have you used a taxi during the last year?" - YES.
- **(Excludes Group 1 - those who can't travel)**

3. Inter-City

Those who have trouble using *intercity* transportation services are defined as:

- question F26(#3) and/or F30(#5) and/or F34(#5) and/or F38(#5): "Because of your condition, do you have any trouble using an airplane/bus/train/ferry, as a means of long distance travel?" - YES; and/or,
- question F22(#1): "Because of your condition, do you require an attendant or companion to accompany you on long distance trips?" - YES; and/or,
- question F23(#3): "Because of your condition, do you require any specialized transportation services or facilities for long distance travel?" - YES.
- **(Excludes Group 1 - those who can't travel)**

4. Personal Vehicle

Those who have trouble using *personal vehicles* are defined as:

- question F6(#'s 01, 03, 05, 07, 09): "Do you use any special features as a driver" - YES; and/or,
- question F7: "Do you have any difficulty as a passenger?" - YES; and/or,
- question F8(#'s 1, 3, 5): "Do you use any special features as a passenger" - YES.
- **(Excludes Group 1 - those who can't travel)**

5. Other Persons With Transportation Disabilities

Those in the *other* category are defined as:

- **Those who are not in any of the four groups above, and:**

- Those who say that they are "completely unable" to perform any ONE of the following ADL's:

  - HALS question A1b(#3): "Are you completely unable to hear what is said in normal conversation with one other person?" - YES
  - HALS question A5b(#3): "Are you completely unable to see clearly the face of someone from 12 feed/4 metres (example: across a room), with glasses if normally worn?" - YES
  - HALS question A6a(#1): "Have you been diagnosed as being legally blind?" - YES
  - HALS question A8b(#3): "Are you completely unable to walk 400 metres (about three city blocks) without resting?" - YES

- HALS question A9b(#3): "Are you completely unable to walk up and down a flight of stairs (about 12 steps)?" - YES
- HALS question A11b(#3): "Are you completely unable to move from one room to another?" - YES
- HALS question A13b(#3): "When standing, are you completely unable to bend down and pick up an object from the floor (example: a shoe)?" - YES
- HALS question A17b(#3): "Are you completely unable to use your fingers to grasp or handle (such as using pliers or scissors)?" - YES; and/or,

• Those who say that they are "completely unable" to perform any TWO of the following ADL's"

- HALS question A2b(#3): "Are you completely unable to hear what is said in a group conversation with at least three other people?"
- HALS question A3a(#3): "Are you (not) able to understand what is being said over a normal telephone, with a hearing aid if used?"
- HALS question A4b(#3): "Are you completely unable to read ordinary newsprint, with glasses if normally worn?"
- HALS question A7b(#9): You are "not...able to make yourself understood (at all) when speaking with... other people."
- HALS question A12b(#3): "Are you completely unable to stand for long periods of time, that is, more than 20 minutes?"
- HALS question A18(#3): "Are you completely unable to reach in any direction (example: above your head)?"
- HALS question A20(iv-#09): "...Are you limited in the kind or amount of activity you can do...in other activities such as travel, sports or leisure?"
- HALS question A21(#1): "...Do you have any ongoing problems with your ability to remember or learn?"
- HALS question A25(iv-#09): "Because of a long-term emotional, psychological, nervous or mental health condition or problem, are you limited in the kind or amount of activity you can do...in other activities such as travel, sports or leisure?"

It should be noted that double counting is excluded, i.e., although an individual may fit more than one sub-category, they are only counted once in deriving the total transportation disabled figure.

Census Metropolitan Area (CMA)

A census metropolitan area (CMA) is a very large urban area, together with adjacent urban and rural areas (see below for related definitions) which have a high degree of economic and social integration with that urban area. A CMA is delineated around an urban area (called the urbanized core and having a population of at least 100,000, based on the previous census).

Urban and Rural Areas

Statistics Canada defines an urban area as an area which has attained a population concentration of at least 1,000, and a population density of at least 400 per square kilometre, at the time of the most recent census. Rural areas are small towns, villages, and other populated places under 1,000 in population, at the time of the most recent census. Taken together, urban and rural areas cover all of Canada.

Appendix: 1991 HALS Questionnaire

Section F

GOSS GILROY INC.
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Conseillers en gestion

1991 HALS Questionnaire Section F - Transportation

The following is an excerpt from the 1991 Health and Activities Limitation Survey (HALS) "User's Guide"; Statistics Canada, 1991.

I would like to ask you about the means of transportation which you use for local travel. This includes trips to work, shopping, or any other local trips under 80 km (50 miles).

F1 Because of your condition or health problem do you have difficulty leaving your residence to take short trips?

Yes O ===>Go to F2 No O ===>Go to F4

F2 Do you consider yourself housebound?

Yes O ===>Go to F3 No O ===>Go to F4

F3 Why do you consider yourself housebound?

(*INTERVIEWER: Read list. Mark all that apply*).

i) Accessible transportation is not available to you O

ii) Dependent on non-portable aids O

iii) Do not feel safe when you leave your home O

iv) No attendant or companion available to go with you O

v) Need assistance once you get to where you are going O

vi) Your condition or health problem is aggravated when you go out O

vii) You do not want to go out O

viii) Other, please specify O

...Go to F20

F4 **Do you require an attendant or companion to accompany you on short trips?**

Yes O No O

F5 **Do you drive a motor vehicle?**

Yes O ===>Go to F6 No O ===>Go to F7

F6 **Because of your condition or health problem, as a DRIVER do you use...**

		Yes	No
i)	Hand controls or brake controls	O	O
ii)	Hand rails, straps, specialized handles, ramps or lifts	O	O
iii)	Power steering, windows or mirrors	O	O
iv)	Space for wheelchair or other specialized equipment (including storage space)	O	O
v)	Other features, please specify	O	O

F7 **Because of your condition or health problem, do you have any difficulty as a PASSENGER in a motor vehicle?**

Yes O ===>Go to F8

No O ===>Go to F8

Never travel as a passenger O ===>Go to F9

F8 **Because of your condition or health problem, as a PASSENGER do you use...**

		Yes	No
ii)	Hand rails, straps, specialized handles, ramps or lifts	O	O
iv)	Space for wheelchair or other specialized equipment (including storage space)	O	O
v)	Other features, please specify	O	O

F9 Some communities have specialized bus or van services for people who have difficulty using the regular transportation service. When using this specialized service, people can call ahead and ask to be picked up. Is this service available in your area?

Yes O ===>Go to F11

No O ===>Go to F10

Don't Know/Not Sure O ===>Go to F10

F10 Do you need this service?

Yes O ===>Go to F14 No O ===>Go to F14

F11 Do you use this service?

Yes O ===>Go to F12 No O ===>Go to F14

F12 How often do you use this service?

(*INTERVIEWER: Read list. Mark only one*).

i) Almost every day for at least some part of the year O ==>Go to F14

ii) Frequently O ==>Go to F14

iii) Occasionally O ==>Go to F13

iv) Seldom O ==>Go to F13

F13 Why don't you use this bus or van service more often? I will read you a list. Please answer yes or no to each.

		Yes	No
i)	Service not needed more often	O	O
ii)	Service too expensive	O	O
iii)	Service not available on a 24 hour, 7 day a week basis	O	O
iv)	Will not allow your attendant, spouse, child, etc. to travel with you	O	O
v)	Booking rules do not allow for last minute arrangements	O	O
vi)	other please specify	O	O

F14 During the last year have you used local public transportation, for example, bus, rapid transit, subway, metro?

Yes O ===>Go to F15 No O ===>Go to F18

F15 How often do you use the local public transportation service?

(*INTERVIEWER: Read list. Mark only one*).

i) Almost every day for at least some part of the year O

ii) Frequently O

iii) Occasionally O

iv) Seldom O

F16 Do you have any difficulty using your local public transportation service, because of your condition or health problem?

Yes O ===>Go to F17 No O ===>Go to F18

F17 Do you have difficulty...

(*INTERVIEWER: Read list. Mark all that apply*).

i) Getting to or locating the stop O

ii) Waiting at the stop O

iii) Getting on and off vehicle O

iv) Hearing announcements O

v) Seeing signs or notices O

vi) Because of insufficient space to sit or stand in the vehicle O

vii) Standing in the vehicle while it is moving O

viii) Obtaining information about timetables, schedules and routes O

ix) Because of unsupportive staff O

F18 **Because of your condition or health problem have you used a taxi during the last year?**

Yes O ===>Go to F19 No O ===>Go to F20

F19 **How often did you use this taxi service?**

(*INTERVIEWER: Read list. Mark only one*).

i) Almost everyday for at least some part of the year O

ii) Frequently O

iii) Occasionally O

iv) Seldom O

I will now ask you about long-distance travel. By long-distance travel, I mean trips of 80 kms (50 miles) or more.

F20 **Because of your condition or health problem are you prevented from taking any long distance trips?**

Yes O ===>Go to F21 No O ===>Go to F22

F21 What prevents you from taking long distance trips? I will read you a list. Please answer year or no to each.

		Yes	No
i)	Lack of appropriate transportation to and from terminal	O	O
ii)	Moving around terminal or station	O	O
iii)	Boarding or disembarking	O	O
iv)	Seating on board	O	O
v)	Seeing signs or notices	O	O
vi)	Hearing announcements	O	O
vii)	Washroom facilities	O	O
viii)	Unsupportive staff	O	O
ix)	Transporting wheelchair or other specialized aids	O	O
x)	Carrier rules and regulations	O	O
xi)	Flight or ride aggravates your condition	O	O
xii)	Too costly	O	O
xii)	Other, please specify	O	O

F22 Because of your condition or health problem, do you require an attendant or companion to accompany you on long distance trips?

Yes O No O

F23 Because of your condition or health problem, do you require any specialized transportation services or facilities for long distance travel?

Yes O No O

Don't Know O

F24 Can you easily obtain information about specialized transportation services and facilities which you may need for long distance travel?

Yes O No O

Don't Know O

F25 During the last year have you travelled by airplane?

Yes O ===>Go to F26 No O ===>Go to F29

F26 Do you have difficulty travelling by airplane because of your condition or health problem?

Yes O ===>Go to F27 No O ===>Go to F29

F27 What kind of difficultly do you have travelling by airplane?

(*INTERVIEWER: Read list. Mark all that apply*).

		Yes	No
i)	Lack of appropriate transportation to and from terminal	O	O
ii)	Moving around terminal or station	O	O
iii)	Boarding or disembarking	O	O
iv)	Seating on board	O	O
v)	Seeing signs or notices	O	O
vi)	Hearing announcements	O	O
vii)	Washroom facilities	O	O
viii)	Unsupportive staff	O	O
ix)	Transporting wheelchair or other specialized aids	O	O
x)	Carrier rules and regulations	O	O
xi)	Flight or ride aggravates your conditions	O	O
xii)	Too costly	O	O
xii)	Other, please specify	O	O

F28 **Do these difficulties limit the amount of long distance travel that you do by airplane?**

Yes O No O

F29 **During the last year have you travelled by train?**

Yes O ===>Go to F30 No O ===>Go to F33

F30 **Do you have difficulty taking long distance trips by train because of your condition or health problem?**

Yes O ===>Go to F31 No O ===>Go to F33

F31 **What kind of difficulty do you have travelling by train?**

(*INTERVIEWER: Read list. Mark all that apply*).

		Yes	No
i)	Lack of appropriate transportation to and from terminal	O	O
ii)	Moving around terminal or station	O	O
iii)	Boarding or disembarking	O	O
iv)	Seating on board	O	O
v)	Seeing signs or notices	O	O
vi)	Hearing announcements	O	O
vii)	Washroom facilities	O	O
viii)	Unsupportive staff	O	O
ix)	Transporting wheelchair or other specialized aids	O	O
x)	Carrier rules and regulations	O	O
xi)	Flight or ride aggravates your conditions	O	O
xii)	Too costly	O	O
xii)	Other, please specify	O	O

F32 Do these difficulties limit the amount of long distance travel that you do by train?

Yes O No O

F33 During the last year have you travelled long distance by bus?

Yes O ===>Go to F34 No O ===>Go to F37

F34 Do you have difficulty taking long distance trips by bus because of your condition or health problem?

Yes O ===>Go to F35 No O ===>Go to F37

F35 What kind of difficulty do you have travelling long distance by bus?

(*INTERVIEWER: Read list. Mark all that apply*).

		Yes	No
i)	Lack of appropriate transportation to and from terminal	O	O
ii)	Moving around terminal or station	O	O
iii)	Boarding or disembarking	O	O
iv)	Seating on board	O	O
v)	Seeing signs or notices	O	O
vi)	Hearing announcements	O	O
vii)	Washroom facilities	O	O
viii)	Unsupportive staff	O	O
ix)	Transporting wheelchair or other specialized aids	O	O
x)	Carrier rules and regulations	O	O
xi)	Flight or ride aggravates your conditions	O	O
xii)	Too costly	O	O
xii)	Other, please specify	O	O

F36 **Do these difficulties limit the amount of long distance travel that you do by bus?**

Yes O No O

F37 **During the last year have you travelled by ferry?**

Yes O ===>Go to F38 No O ===>Go to F41

F38 **Do you have difficulty taking long distance trips by ferry because of your condition or health problem?**

Yes O ===>Go to F39 No O ===>Go to F41

F39 **What kind of difficulty do you have travelling by ferry?**

(*INTERVIEWER: Read list. Mark all that apply*).

		Yes	No
i)	Lack of appropriate transportation to and from terminal	O	O
ii)	Moving around terminal or station	O	O
iii)	Boarding or disembarking	O	O
iv)	Seating on board	O	O
v)	Seeing signs or notices	O	O
vi)	Hearing announcements	O	O
vii)	Washroom facilities	O	O
viii)	Unsupportive staff	O	O
ix)	Transporting wheelchair or other specialized aids	O	O
x)	Carrier rules and regulations	O	O
xi)	Flight or ride aggravates your conditions	O	O
xii)	Too costly	O	O
xii)	Other, please specify	O	O

F40 **Do these difficulties limit the amount of long distance travel that you do by ferry?**

Yes O No O

F41 **During the last year have you travelled long distance by car, van or truck?**

Yes O ===>Go to F42 No O ===>Go to F43

F42 **Because of your condition or health problem, do you have difficulty using a car, van or truck for long distance travel?**

Yes O No O

Don't Know O

F43 **How many long distance trips of at least 80 km or 50 miles have you taken between April 1 and June 30th, 1991 by...**

(*INTERVIEWER: If none, enter 000*).

i) airplane ____
ii) bus ____
iii) train ____
iv) ferry ____
v) car, van or truck ____

1991 HALS Questionnaire Section F - Transportation

The following is an excerpt from the 1991 Health and Activities Limitation Survey (HALS) "User's Guide"; Statistics Canada, 1991.

I would like to ask you about the means of transportation which you use for local travel. This includes trips to work, shopping, or any other local trips under 80 km (50 miles).

F1 Because of your condition or health problem do you have difficulty leaving your residence to take short trips?

Yes O ===>Go to F2 No O ===>Go to F4

F2 Do you consider yourself housebound?

Yes O ===>Go to F3 No O ===>Go to F4

F3 Why do you consider yourself housebound?

(*INTERVIEWER: Read list. Mark all that apply*).

i) Accessible transportation is not available to you O

ii) Dependent on non-portable aids O

iii) Do not feel safe when you leave your home O

iv) No attendant or companion available to go with you O

v) Need assistance once you get to where you are going O

vi) Your condition or health problem is aggravated when you go out O

vii) You do not want to go out O

viii) Other, please specify O

...Go to F20

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F4 **Do you require an attendant or companion to accompany you on short trips?**

Yes O No O

F5 **Do you drive a motor vehicle?**

Yes O ===>Go to F6 No O ===>Go to F7

F6 **Because of your condition or health problem, as a DRIVER do you use...**

		Yes	No
i)	Hand controls or brake controls	O	O
ii)	Hand rails, straps, specialized handles, ramps or lifts	O	O
iii)	Power steering, windows or mirrors	O	O
iv)	Space for wheelchair or other specialized equipment (including storage space)	O	O
v)	Other features, please specify	O	O

F7 **Because of your condition or health problem, do you have any difficulty as a PASSENGER in a motor vehicle?**

Yes O ===>Go to F8

No O ===>Go to F8

Never travel as a passenger O ===>Go to F9

F8 **Because of your condition or health problem, as a PASSENGER do you use...**

		Yes	No
ii)	Hand rails, straps, specialized handles, ramps or lifts	O	O
iv)	Space for wheelchair or other specialized equipment (including storage space)	O	O
v)	Other features, please specify	O	O

F9 **Some communities have specialized bus or van services for people who have difficulty using the regular transportation service. When using this specialized service, people can call ahead and ask to be picked up. Is this service available in your area?**

Yes O ===>Go to F11

No O ===>Go to F10

Don't Know/Not Sure O ===>Go to F10

F10 **Do you need this service?**

Yes O ===>Go to F14 No O ===>Go to F14

F11 **Do you use this service?**

Yes O ===>Go to F12 No O ===>Go to F14

F12 **How often do you use this service?**

(*INTERVIEWER: Read list. Mark only one*).

i) Almost every day for at least some part of the year O ==>Go to F14

ii) Frequently O ==>Go to F14

iii) Occasionally O ==>Go to F13

iv) Seldom O ==>Go to F13

F13 **Why don't you use this bus or van service more often? I will read you a list. Please answer yes or no to each.**

		Yes	No
i)	Service not needed more often	O	O
ii)	Service too expensive	O	O
iii)	Service not available on a 24 hour, 7 day a week basis	O	O
iv)	Will not allow your attendant, spouse, child, etc. to travel with you	O	O
v)	Booking rules do not allow for last minute arrangements	O	O
vi)	other please specify	O	O

F14 During the last year have you used local public transportation, for example, bus, rapid transit, subway, metro?

Yes O ===>Go to F15 No O ===>Go to F18

F15 How often do you use the local public transportation service?

(*INTERVIEWER: Read list. Mark only one*).

i) Almost every day for at least some part of the year O

ii) Frequently O

iii) Occasionally O

iv) Seldom O

F16 Do you have any difficulty using your local public transportation service, because of your condition or health problem?

Yes O ===>Go to F17 No O ===>Go to F18

F17 Do you have difficulty...

(*INTERVIEWER: Read list. Mark all that apply*).

i) Getting to or locating the stop O

ii) Waiting at the stop O

iii) Getting on and off vehicle O

iv) Hearing announcements O

v) Seeing signs or notices O

vi) Because of insufficient space to sit or stand in the vehicle O

vii) Standing in the vehicle while it is moving O

viii) Obtaining information about timetables, schedules and routes O

ix) Because of unsupportive staff O

F18 Because of your condition or health problem have you used a taxi during the last year?

Yes O ===>Go to F19 No O ===>Go to F20

F19 How often did you use this taxi service?

(*INTERVIEWER: Read list. Mark only one*).

i) Almost everyday for at least some part of the year O

ii) Frequently O

iii) Occasionally O

iv) Seldom O

I will now ask you about long-distance travel. By long-distance travel, I mean trips of 80 kms (50 miles) or more.

F20 Because of your condition or health problem are you prevented from taking any long distance trips?

Yes O ===>Go to F21 No O ===>Go to F22

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F21 What prevents you from taking long distance trips? I will read you a list. Please answer year or no to each.

		Yes	No
i)	Lack of appropriate transportation to and from terminal	O	O
ii)	Moving around terminal or station	O	O
iii)	Boarding or disembarking	O	O
iv)	Seating on board	O	O
v)	Seeing signs or notices	O	O
vi)	Hearing announcements	O	O
vii)	Washroom facilities	O	O
viii)	Unsupportive staff	O	O
ix)	Transporting wheelchair or other specialized aids	O	O
x)	Carrier rules and regulations	O	O
xi)	Flight or ride aggravates your condition	O	O
xii)	Too costly	O	O
xii)	Other, please specify	O	O

F22 Because of your condition or health problem, do you require an attendant or companion to accompany you on long distance trips?

Yes O No O

F23 Because of your condition or health problem, do you require any specialized transportation services or facilities for long distance travel?

Yes O No O

Don't Know O

F24 Can you easily obtain information about specialized transportation services and facilities which you may need for long distance travel?

Yes O No O

Don't Know O

F25 During the last year have you travelled by airplane?

Yes O ===>Go to F26 No O ===>Go to F29

F26 Do you have difficulty travelling by airplane because of your condition or health problem?

Yes O ===>Go to F27 No O ===>Go to F29

F27 What kind of difficultly do you have travelling by airplane?

(*INTERVIEWER: Read list. Mark all that apply*).

		Yes	No
i)	Lack of appropriate transportation to and from terminal	O	O
ii)	Moving around terminal or station	O	O
iii)	Boarding or disembarking	O	O
iv)	Seating on board	O	O
v)	Seeing signs or notices	O	O
vi)	Hearing announcements	O	O
vii)	Washroom facilities	O	O
viii)	Unsupportive staff	O	O
ix)	Transporting wheelchair or other specialized aids	O	O
x)	Carrier rules and regulations	O	O
xi)	Flight or ride aggravates your conditions	O	O
xii)	Too costly	O	O
xii)	Other, please specify	O	O

F28 **Do these difficulties limit the amount of long distance travel that you do by airplane?**

Yes O No O

F29 **During the last year have you travelled by train?**

Yes O ===>Go to F30 No O ===>Go to F33

F30 **Do you have difficulty taking long distance trips by train because of your condition or health problem?**

Yes O ===>Go to F31 No O ===>Go to F33

F31 **What kind of difficulty do you have travelling by train?**

(*INTERVIEWER: Read list. Mark all that apply*).

		Yes	No
i)	Lack of appropriate transportation to and from terminal	O	O
ii)	Moving around terminal or station	O	O
iii)	Boarding or disembarking	O	O
iv)	Seating on board	O	O
v)	Seeing signs or notices	O	O
vi)	Hearing announcements	O	O
vii)	Washroom facilities	O	O
viii)	Unsupportive staff	O	O
ix)	Transporting wheelchair or other specialized aids	O	O
x)	Carrier rules and regulations	O	O
xi)	Flight or ride aggravates your conditions	O	O
xii)	Too costly	O	O
xii)	Other, please specify	O	O

F32 Do these difficulties limit the amount of long distance travel that you do by train?

Yes O No O

F33 During the last year have you travelled long distance by bus?

Yes O ===>Go to F34 No O ===>Go to F37

F34 Do you have difficulty taking long distance trips by bus because of your condition or health problem?

Yes O ===>Go to F35 No O ===>Go to F37

F35 What kind of difficulty do you have travelling long distance by bus?

(*INTERVIEWER: Read list. Mark all that apply*).

		Yes	No
i)	Lack of appropriate transportation to and from terminal	O	O
ii)	Moving around terminal or station	O	O
iii)	Boarding or disembarking	O	O
iv)	Seating on board	O	O
v)	Seeing signs or notices	O	O
vi)	Hearing announcements	O	O
vii)	Washroom facilities	O	O
viii)	Unsupportive staff	O	O
ix)	Transporting wheelchair or other specialized aids	O	O
x)	Carrier rules and regulations	O	O
xi)	Flight or ride aggravates your conditions	O	O
xii)	Too costly	O	O
xii)	Other, please specify	O	O

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F36 Do these difficulties limit the amount of long distance travel that you do by bus?

Yes O No O

F37 During the last year have you travelled by ferry?

Yes O ===>Go to F38 No O ===>Go to F41

F38 Do you have difficulty taking long distance trips by ferry because of your condition or health problem?

Yes O ===>Go to F39 No O ===>Go to F41

F39 What kind of difficulty do you have travelling by ferry?

(*INTERVIEWER: Read list. Mark all that apply*).

		Yes	No
i)	Lack of appropriate transportation to and from terminal	O	O
ii)	Moving around terminal or station	O	O
iii)	Boarding or disembarking	O	O
iv)	Seating on board	O	O
v)	Seeing signs or notices	O	O
vi)	Hearing announcements	O	O
vii)	Washroom facilities	O	O
viii)	Unsupportive staff	O	O
ix)	Transporting wheelchair or other specialized aids	O	O
x)	Carrier rules and regulations	O	O
xi)	Flight or ride aggravates your conditions	O	O
xii)	Too costly	O	O
xii)	Other, please specify	O	O

F40 **Do these difficulties limit the amount of long distance travel that you do by ferry?**

Yes O No O

F41 **During the last year have you travelled long distance by car, van or truck?**

Yes O ===>Go to F42 No O ===>Go to F43

F42 **Because of your condition or health problem, do you have difficulty using a car, van or truck for long distance travel?**

Yes O No O

Don't Know O

F43 **How many long distance trips of at least 80 km or 50 miles have you taken between April 1 and June 30th, 1991 by...**

(*INTERVIEWER: If none, enter 000*).

i) airplane ____
ii) bus ____
iii) train ____
iv) ferry ____
v) car, van or truck ____

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